Applicants: Stoffel et al. Serial No.: 10/824,644

Filed: April 13, 2004

Amendment and Response to April 17, 2007 Office Action

Page 4 of 9

## IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-17. Cancelled.

18. (Currently Amended) An isolated single stranded anti-microRNA molecule comprising a minimum of ten moieties and a maximum of fifty moieties on a molecular backbone, the molecular backbone comprising backbone units, each moiety comprising a base bonded to a backbone unit, each base forming a Watson-Crick base pair with a complementary base wherein[[÷]] said molecule comprises a sequence of bases identified in SEQ. ID. NO. 41.

at least ten contiguous bases have a sequence complementary to a contiguous sequence of bases in SEQ ID NO 1, except that up to thirty percent of the base pairs may be wobble base pairs, and up to 10% of the contiguous bases may be additions, deletions, mismatches, or combinations thereof;

no more than fifty percent of the contiguous moieties contain deoxyribonuleotide backbone units; and

the molecule is capable of inhibiting microRNP activity.

- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Cancelled)
- 22. (Cancelled)
- 23. (Original) A molecule according to claim 18, wherein at least one of the moieties is a modified deoxyribonucleotide moiety.

Applicants: Stoffel et al. Serial No.: 10/824,644 Filed: April 13, 2004

Amendment and Response to April 17, 2007 Office Action

Page 5 of 9

- 24. (Original) A molecule according to claim 23 wherein the modified deoxyribonucleotide is a phosphorothioate deoxyribonucleotide moiety.
- 25. (Original) A molecule according to claim 23, wherein the modified deoxyribonucleotide is N'3-N'5 phosphoroamidate deoxyribonucleotide moiety.
- 26. (Original) A molecule according to claim 18, wherein at least one of the moieties is a modified ribonucleotide moiety.
- 27. (Original) A molecule according to claim 26, wherein the modified ribonucleotide is substituted at the 2' position.
- 28. (Original) A molecule according to claim 27, wherein the substituent at the 2' position is a  $C_1$  to  $C_4$  alkyl group.
- 29. (Original) A molecule according to claim 28, wherein the alkyl group is methyl.
  - 30. (Original) A molecule according to claim 28, wherein the alkyl group is allyl.
- 31. (Original) A molecule according to claim 27, wherein the substituent at the 2' position is a  $C_1$  to  $C_4$  alkoxy  $C_1$  to  $C_4$  alkyl group.
- 32. (Original) A molecule according to claim 31, wherein the  $C_1$  to  $C_4$  alkoxy  $C_1$  to  $C_4$  alkyl group is methoxyethyl.
- 33. (Original) A molecule according to claim 26, wherein the modified ribonucleotide has a methylene bridge between the 2'-oxygen atom and the 4'-carbon atom.
- 34. (Original) A molecule according to claim 18, wherein at least one of the moieties is a peptide nucleic acid moiety.
- 35. (Original) A molecule according to claim 18, wherein at least one of the moieties is a 2'-fluororibonucleotide moiety.

Applicants: Stoffel et al. Serial No.: 10/824,644 Filed: April 13, 2004

Amendment and Response to April 17, 2007 Office Action

Page 6 of 9

- 36. (Original) A molecule according to claim 18, wherein at least one of the moieties is a morpholino phosphoroamidate nucleotide moiety.
- 37. (Original) A molecule according to claim 18, wherein at least one of the moieties is a tricyclo nucleotide moiety.
- 38. (Original) A molecule according to claim 18, wherein at least one of the moieties is a cyclohexene nucleotide moiety.
- 39. (Original) A molecule according to claim 18, wherein the molecule is a chimeric molecule.
- 40. (Original) A molecule according to claim 18, wherein the molecule comprises at least one modified moiety for increased nuclease resistance.
- 41. (Original) A molecule according to claim 40, wherein the nuclease is an exonuclease.
- 42. (Original) A molecule according to claim 41, wherein the molecule comprises at least one modified moiety at the 5' end.
- 43. (Original) A molecule according to claim 41, wherein the molecule comprises at least two modified moieties at the 5' end.
- 44. (Original) A molecule according to claim 41, wherein the molecule comprises at least one modified moiety at the 3' end.
- 45. (Original) A molecule according to claim 41, wherein the molecule comprises at least two modified moieties at the 3' end.
- 46. (Original) A molecule according to claim 41, wherein the molecule comprises at least one modified moiety at the 5' end and at least one modified moiety at the 3'end.

Applicants: Stoffel et al. Serial No.: 10/824,644 Filed: April 13, 2004

Amendment and Response to April 17, 2007 Office Action

Page 7 of 9

- 47. (Original) A molecule according to claim 41, wherein the molecule comprises at least two modified moieties at the 5' end and at least two modified moieties at the 3'end.
- 48. (Original) A molecule according to claim 41, wherein the molecule comprises a cap at the 5' end, the 3' end, or both ends of the molecule.
- 49. (Original) A molecule according to claim 48, wherein the molecule comprises a chemical cap.
- 50. (Original) A molecule according to claim 48, wherein the molecule comprises an inverted nucleotide cap.
- 51. (Original) A molecule according to claim 40, wherein the nuclease is an endonuclease.
- 52. (Original) A molecule according to claim 51, wherein the molecule comprises at least one modified moiety between the 5' and 3' end.
- 53. (Original) A molecule according to claim 51, wherein the molecule comprises a chemical cap between the 5' end and 3' end.
- 54. (Original) A molecule according to claim 18, wherein all of the moieties are nuclease resistant.

55-67. (Cancelled)